REMARKS

The Office Action dated October 30, 2007 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-28 are pending in the application. Claims 1, 7-8, 13-22, and 26-28 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 11, 23, and 25 have been canceled. Claims 29-37 are new. No new subject matter has been added. Support for these amendments can be found throughout the Specification, including at paragraphs 11, 28, 32-34, and 37-38. Claims 1-10, 12-22, 24, and 26-37 are submitted for consideration.

Claims 1-10, 11-22, 24, and 26-28 were rejected under 35 U.S.C. §102(e) as being anticipated by Pirttimaa (US 2003/0154400 – hereinafter Pirttimaa). This rejection is traversed as follows.

Claim 1, upon which claims 2-10, 12, 28, and 33 depend, is generally directed to a method that includes forwarding a prefix value from a first node to a second node in a packet switched environment, said prefix value referring to a portion of a first internet protocol address associated with the first node. The method also includes creating a security association between the first node and the second node based on the prefix value. The security association is valid for a plurality of different internet protocol addresses,

each of said internet protocol addresses including said portion of the first internet protocol address to which the prefix value refers.

Claim 13, upon which claims 14-22, 24, and 34 depend, is generally directed to a system that includes a first node and a second node in a packet switched environment. The first node is configured to forward a prefix value in a message to the second node. The prefix value refers to a portion of a first internet protocol address of the first node. The second node is configured to create a security association with the first node based on the prefix value. The security association is valid for a plurality of different internet protocol addresses, and each of the internet protocol addresses includes a portion of the first internet protocol address to which the prefix value refers.

Claim 26, upon which claim 35 depends, is generally directed to a communication terminal that includes a prefix value to be forwarded to a node in a packet switched environment, to create a security association with the communication terminal. The prefix value refers to a portion of a first internet protocol address of the communication terminal. The security association is valid for a plurality of different internet protocol addresses, each of the internet protocol addresses includes said portion of the first internet protocol address to which the prefix value refers.

Claim 27 is generally directed to a security association apparatus that includes a first communication means and a second communication means in a packet switched environment. The security association apparatus also includes a forwarding means for forwarding a prefix value in a message from the first communication means to the second

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communication means, said prefix value referring to a portion of a first internet protocol address of the first communication means. The security association apparatus further includes a creating means for creating a security association between the first communication means and the second communication means based on the prefix value. The security association is valid for a plurality of different internet protocol addresses. Each of the internet protocol addresses includes said portion of the first internet protocol address to which the prefix value refers.

Claim 29 is generally directed to a communication terminal that includes a forwarding means for forwarding a prefix value to a node in a packet switched environment to create a security association with the communication terminal. The prefix value refers to a portion of a first internet protocol address of the communication terminal. The security association is valid for a plurality of different internet protocol addresses. Each of said internet protocol addresses includes said portion of the first internet protocol address to which the prefix value refers.

Claim 30, upon which claim 36 depends, is generally directed to a security association apparatus that includes a first communication unit and a second communication unit in a packet switched environment. The security association apparatus also includes a forwarding unit configured to forward a prefix value in a message from the first communication unit to the second communication unit. The prefix value refers to a portion of the internet protocol address of the first communication unit. The security association apparatus also includes a creating unit configured to create a

security association between the first communication unit and the second communication unit based on the prefix value. The security association is valid for a plurality of different internet protocol addresses. Each of the internet protocol addresses includes a portion of the first internet protocol address to which the prefix value refers.

Claim 31, upon which claim 37 depends, is generally directed to a second node that includes a receiving unit for receiving a prefix value from a first node in a packet switched environment. The prefix value refers to a portion of a first internet protocol address of the first node. The second node also includes a creation unit for creating a security association between the first node and the second node based on the prefix value. The security association is valid for a plurality of different internet protocol addresses. Each of said internet protocol addresses include said portion of the first internet protocol address to which the prefix value refers.

Claim 32 is generally directed to a second node that includes a receiving means for receiving a prefix value from a first node in a packet switched environment. The prefix value refers to a portion of a first internet protocol address of the first node. The second node also includes a creation means for creating a security association between the first node and the second node based on the prefix value. The security association is valid for a plurality of different internet protocol addresses. Each of said plurality of internet protocol addresses includes said portion of the first internet protocol address to which the prefix value refers.

Each of the foregoing claims recites limitations that are not disclosed or suggested by Pirttimaa.

Pirttimaa generally discloses a network element for providing secure access to a packet data network. In Pirttimaa, a first source information is derived from a message received from a terminal device. The first source information is compared with a second source information derived from a packet data unit used for conveying said message, or derived from a security association set up between the terminal device and the data network. A protection processing for protecting the packet data network from a fraudulent user attack is then initiated based on the comparing result.

However, Pirttimaa fails to disclose or suggest "said prefix value referring to a portion of a first internet protocol address associated with the first node; creating a security association between the first node and the second node based on the prefix value," as recited in claim 1.

The Office Action takes the position that the "SIP register message with address included" of Pirttimaa is comparable to the "prefix value" of claim 1. However, Pirttimaa discloses that the *entire* "address" is used to create a security association between the user equipment and the proxy. Distinctly, the "prefix value" of claim 1 refers to a *portion* of a first internet protocol. In Pirttimaa, the address used to create the security association is the full IMPI of the user equipment, i.e., the full IP address of the UE. In paragraph 41 of Pirttimaa, the IP address is bound with the security parameters (e.g., the integrity key) of the user equipment in the proxy. Referring to paragraph 47 and

Figure 4 of Pirttimaa, this full IMPI is used in a comparison with an IP address (i.e., a full IMPI) included in a SIP message.

There is no disclosure or suggestion that the address information bound to the Pirttimaa integrity key is only part of the IMPI. Additionally, there is no disclosure or suggestion that the address information included in the header of a SIP message is only part of the IMPI of a user equipment. Accordingly, Pirttimaa fails to disclose or suggest "said prefix value referring to a portion of a first internet protocol address associated with the first node; creating a security association between the first node and the second node based on the prefix value," as recited in claim 1.

Additionally, Pirttimaa fails to disclose or suggest "the security association is valid for a plurality of different internet protocol addresses, each of said plurality of internet protocol addresses including said portion of the first internet protocol address to which the prefix value refers," as recited in claim 1.

A review of Pirttimaa demonstrates that Pirttimaa only discloses a security association regarding a single IP address which creates various problems. For example, if a security association is established using the actual IP address of a user equipment, then when the user equipment generates a different IP address, such as when it moves from one cell to another, then the security association will need to be reestablished. When a user equipment changes its IP address, then the user equipment may delete an existing security association and initiate an unprotected registration procedure using its new IP address as the source IP address in the packets carrying the REGISTER message.

However, this disadvantageously complicates the security association management in the proxy, as there might be ongoing sessions when the need may arise at the user equipment to delete the current security association and set up a new one.

The limitations recited in claim 1 advantageously avoid this problem since the security association between two nodes is based on a prefix value of an IP address. This enables the first node to generate new IP addresses (within the prefix) for itself and send the packets with that address inside the security association. Therefore, the user equipment would not be required to delete the existing security association and set up a new one towards its newly generated IP address. In other words, the security association does not need to be negotiated every time a user equipment performs an auto-configuration. Furthermore, a single security association can be used for a plurality of different devices with different IP addresses, so long as each of the IP addresses of those devices includes the portion of the first IP address to which the prefix value refers.

Pirttimaa, on the other hand, is only concerned with securing access by user equipment to IMS services by carrying out a comparison between an IP address included in the header of a SIP message and another address. There is no disclosure or suggestion in Pirttimaa of creating a security association based on a prefix value referring to a portion of an IP address associated with a node, and no discussion of setting up a security association which is valid for a plurality of different IP addresses that include a common portion to which such a prefix value refers.

In light of the foregoing, Applicant respectfully submits that Pirttimaa fails to disclose or suggest all the limitations of claim 1. Additionally, Applicant respectfully asserts that Pirttimaa fails to disclose or suggest all the limitations of claims 13, 16, 26-27, and 29-32 as these claims recite limitations similar to the limitations of claim 1, though each claim has its own scope. Furthermore, Applicant respectfully asserts that Pirttimaa fails to disclose or suggest the limitations of claims 2-20, 12-22, 24, 28, and 33-37 for at least their dependency from claims 1, 13, 26, 30, and 31. Therefore, Applicant respectfully requests that the §102(e) rejection be withdrawn and that all of the claims pass to allowance and issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,
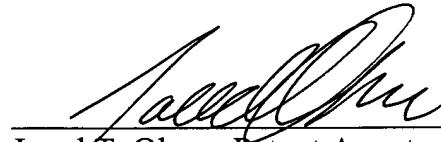
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Enclosures: Additional Claim Fee transmittal